



# 711 HPW

## COUNTERPROLIFERATION BRANCH

### The Laboratorian's Role in the Counterproliferation Mission

#### (Briefing Charts)



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711<sup>th</sup> HPW/RHPC

*Counter Any Agent, Anywhere, Any Time*

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# OUTLINE



- **What is Counterproliferation?**
- **Counterproliferation Branch Mission & Priorities**
- **Counterproliferation Branch Mission Areas**
- **The Medical Lab Technician's Role**
- **Questions**



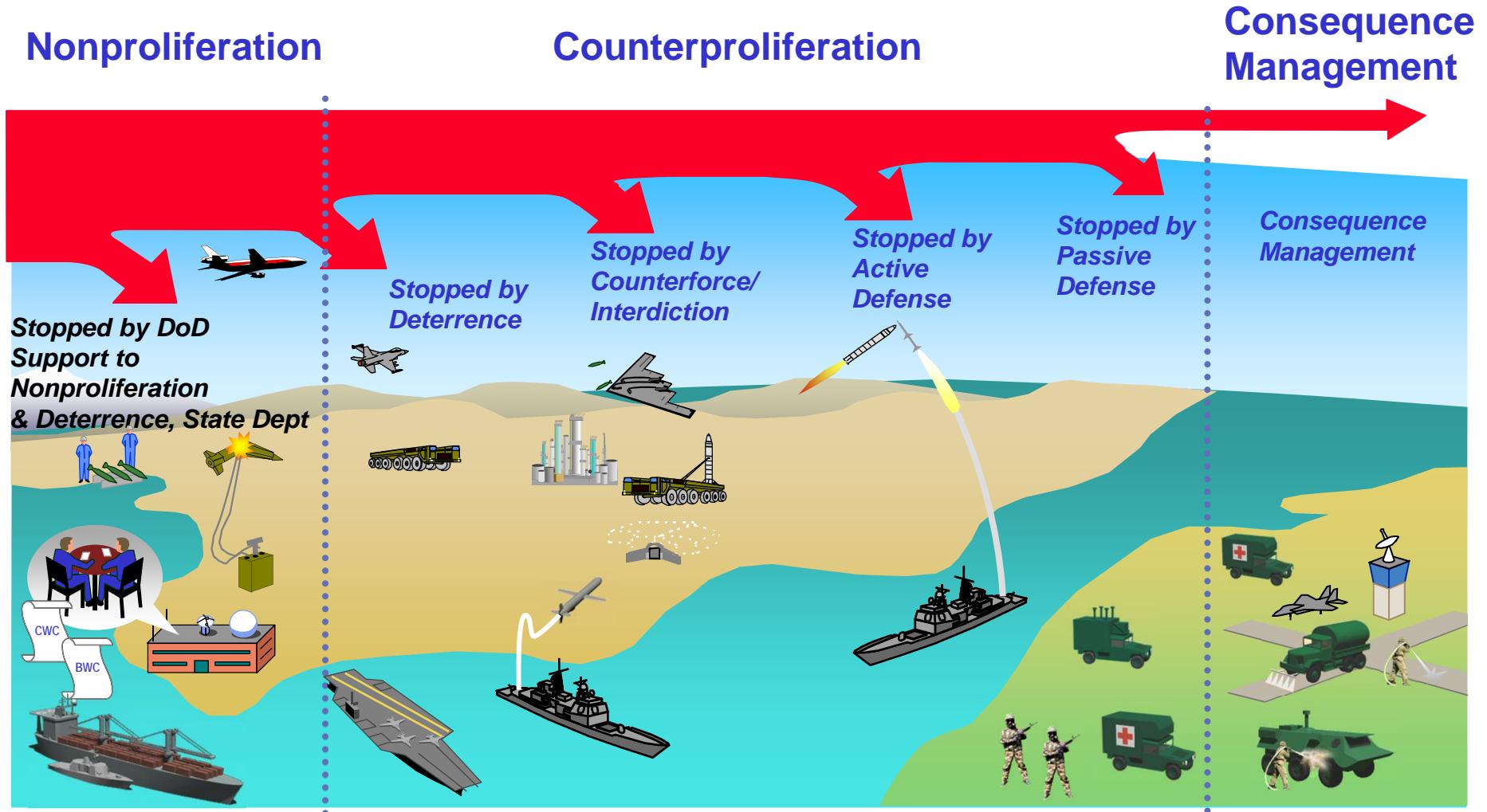
# What is Counterproliferation?



- **Counterproliferation** refers to diplomatic, intelligence and military efforts to combat the proliferation of weapons including both conventional weapons and weapons of mass destruction.



# National Strategy for Combating WMD





# Counterproliferation Branch Mission & Priorities



- **Mission:** Develop and apply revolutionary bioscience research and technology to increase capability to deliver precision effects and to survive in the battle space.
- **Priorities:**
  - Counter CBRN weapons of mass destruction through the development of techniques such as sensing, neutralization and post strike assessment (*Deliver Precision Effects*)
  - Minimize the impact of WMD attacks and improve capability to restore operations quickly (*Access and Survive in the Battlespace*)



# Counterproliferation Branch Mission Areas



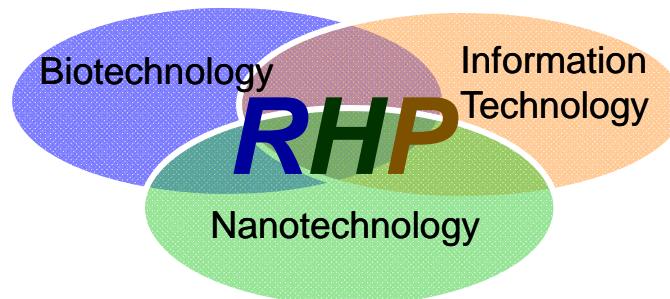
- **Develop and apply revolutionary research, science, and technology to:**
  - Increase and ensure war fighter survival and operability in chemical, biological and radiological (CBR) contaminated battle space
  - Increase capability to deliver effective precision effects against CBR targets
- **Agent Defeat and Precision Engagement**
  - Deny use of biological agents through precision delivery & complete neutralization of BSAT targets; reduce collateral damage due to post-plume BSAT contaminants
- **Sustained Operations through Aircraft Decontamination**
  - Aircraft Reconstitution Initiative: Provide cost-effective Aircraft CBR decontamination procedures
- **WMD Quantification Sciences**
  - Provide accurate threat assessment of CBR hazard persistence & operational risk tradeoffs to Commanders (ACC/AMC/JPEO-CBD/DTRA)
- **CBR Situational Awareness & Operational Effects Modeling, Simulation & Analysis**
  - Model (CBW) attacks and assessing operational effects
  - Risk mitigation and consequence management strategies





# Counterproliferation Branch

## *Combating Weapons of Mass Destruction*



## RHPC

**Counterproliferation**

*Find Fix Track Target Engage & Assess*

**Consequence Management**

*Situational Awareness, Prediction, & Mgmt*

*Brooks*

- Advanced Biological Taggants
- Neutralization of Concealed Threat Agents
- Taggants for Tracking Concealed Threats
- Nanotaggants for CP & National Security
- Bio Threat Neutralization Technology

*UC*

- Situational Awareness & OPS Effects MS&A
- Aircraft Reconstitution Initiative
- WMD Quantification & Sciences
- Interactome Science In Genomic High Throughput
- Odorant-Based Biometrics for Advanced Tagging and Tracking Systems

*WPAFB*



# Counterproliferation Branch Unique Mission



- AF's only BSL-3 research lab
  - Only BSL3 cleared to handle BSATs
  - Enables a safe environment for BSAT work
  - Houses USAF BSAT collection
  - Supports AF unique need for "live agent" testing/validation
  - *"Cradle-to-grave"* accountability while providing a safe & secure environment
- Roles of military lab techs:
  - Research technicians: work along side senior scientists
  - Facility managers: coordinate maintenance and contracts
  - Security managers
  - Custodial staff: perform grounds and internal cleaning
- An AF mandated Biological Personnel Reliability Program (BPRP) is strictly enforced





# What is BPRP?



- In August 2008, HQ USAF ordered a top down review of all operations that handle and store BSATs
- A result of that review was to institute a BPRP for all government employees certified to handle BSATs
- BPRP requires extensive interview process
  - Medical records review
  - Appropriate security clearance
  - FBI background check
  - CDC authorization to handle BSAT
  - Personnel records review
  - Random Urine Drug Testing
  - Commander Approval



# Lab Technician Roles



## FIELD WORK





# Lab Technician Roles



## Mosquito Trapping



## FIELD WORK



## Mice Field Collections



# Questions?

